

ABSTRACT

A head suspension mounts a head assembly in a disc drive. The head suspension includes controllable bending elements on the gimbal portion of the head suspension which allow dynamic control of the flying attitude of the head assemblies, and thus the flying height. In a first embodiment, the control elements are bi-metal features that utilize differential thermal expansion to control the flying attitude. In a second, and presently preferred, embodiment, the control elements are piezo-electric elements which provide bi-directional control of associated elements of the gimbal portion of the head suspension. In another aspect, the controllable bending elements are used to increase the flying height of the head assembly as the head assembly is moved from the data recording area of the disc into engagement with a textured landing zone.